

REMARKS

The examiner's courtesy and cooperation in a personal interview on August 3, 2000 with Mr. Rupp and the undersigned are appreciatively acknowledged. As a result of the foregoing amendment, the claims have been modified in accordance with the discussion during that interview. In particular, claims 1-59 have been cancelled without prejudice and replaced by new claims 60-71. New claims 60-64 recite one embodiment for a process for preparing the completely biodegradable molded body of the present invention. Claim 65 recite a another embodiment for producing the completely biodegradable molded body of the invention. Claims 66-71 are product-by-process claims dependent upon the two process claims.

As noted, the description of the molded body of the invention clearly points out that the body is completely decomposable or biodegradable in accordance with the original disclosure at the bottom of page 3. In addition, the process of claim 65 is described in the specification in the specification bridging pages 21 and 22.

As a result of the foregoing amendment, it is believed that all of the various formal rejections raised by the examiner in the rejection under the second paragraph of 35 U.S.C. § 112 have now been obviated. Thus, the various terms objected to by the examiner in that rejection have been eliminated, and proper claim language has been used. In addition, the problem with respect to lack of antecedent basis no longer appears in the amended claims.

Accordingly, the rejection under the second paragraph of 35 U.S.C. § 112 should be withdrawn.

Reconsideration and withdrawal of the claims as being unpatentable over Mayer et al '318 in view of Pommier et al '378 or Arnold et al WO '628 are requested. The examiner cited Mayer et al '318 as showing cellulose acetate binders with starch and agricultural fillers. The examiner recognized that Mayer et al does not teach using mixtures of short and long fibers. But there are additional defects in Mayer et al. In particular, Mayer et al only discloses a composition for making injection molded parts by mixing together solid ingredients to feed into an injection molding machine. Thus no water can be utilized in the method and/or composition disclosed in Mayer. In contrast, as is clearly disclosed in the present application and specifically required in the claims as amended, water must be present because the molded body of the present invention is obtained by baking. Thus, Mayer et al does not disclose any composition in accordance with the present invention, much less, a method for baking the composition into the desired molded shape. Mayer specifically requires an injection molding process and a composition that is amenable to such a process.

The Pommier et al reference does not disclose a completely biodegradable body. In particular, for example, at column 2, lines 59 and following, it is disclosed that synthetic fibers are present in the support layer and that these fibers can be polyethylene in an amount of 20-30% by weight. Clearly, polyethylene is not a biodegradable material and therefore Pommier does not disclose a composition which is completely biodegradable and liquid resistant and impermeable as required by the present claims.

Finally, with respect to the Arnold et al WO '628 reference, most certainly, this reference discloses the preparation of a composition which has many of the ingredients required by the present claims. However, there is absolutely no disclosure in Arnold et al of the presence of a hydrophobic layer or a component which makes the composition liquid impermeable. Thus, Arnold et al gives no information or motivation to include an ingredient or layer which would provide water-impermeability and yet would also be completely biodegradable. Neither of Mayer et al or Pommier et al contain any information which would suggest to the skilled artisan to do so, particularly in light of the absence of water in Mayer et al and the presence of a non-biodegradable component in Pommier et al. Accordingly, the rejection on this combination of references is untenable and should be withdrawn.

Reconsideration and withdrawal of the rejection of the claims as amended under 35 U.S.C. §103(a) as being unpatentable over Karas et al 'CA 669 or Suskind '962 in view of Pommier et al or Arnold et al are also requested. Karas is relied on as showing the lamination of a film of polylactide onto the face of a cellulose fiber web to produce a biodegradable web that is easily recycled. The examiner recognizes that Karas et al does not show the use of fibers of various sizes. However, as is clear from a complete copy of Karas (copy enclosed herewith) for the examiner's convenience, Karas et al is directed solely to a web which has a biodegradable binder. Indeed, the entire focus of the Karas Patent is the nature of the binder. For example, the binders utilized and disclosed are found from monomers which are biodegradable. However, as pointed out at column 7, lines 10-28, the binders aroused with synthetic fibers, including polyolefins, such as, polyethylene and polypropylene. Obviously, such fibers would not make a completely biodegradable product. Thus, Karas et al is not at

all concerned with making a completely biodegradable product since it is concerned solely with the nature of the binder which can be used with a web of non-biodegradable fiber.

The Suskind Patent is cited as teaching a biodegradable container made from waste paper that is covered with a film of polyester or covered with a polylactide coating. However, this is not a completely accurate characterization of Suskind. Rather, the invention of Suskind is directed to a paperboard which contains a coating of a biodegradable material and, on the other side, a coating of a photodegradable material. Thus, as is clear from column 4, lines 60-65, in order to achieve the object of the invention, a compostable package for containing liquids includes a base of paperboard having two sides with one side coated with a biodegradable linear aliphatic polyester and the other side, a photodegradable polyolefin. Clearly, such a photodegradable polyolefin is not a biodegradable material. Polyolefin is used to prevent leaks. Suitable polyolefins include ethylenically unsaturated hydrocarbon (see column 10, lines 31 and following). Accordingly, Suskind does not suggest to one skilled in the art that it is important to have a completely biodegradable product and in fact using the teachings of Suskind, one would not end up with a completely biodegradable product.

Pommier et al and Arnold et al have been discussed above and clearly, they also are insufficient to suggest the combination of a biodegradable, baked, molded product which includes a liquid impermeable barrier layer or which is impermeable to liquid. Accordingly, this combination of references fails to meet the requirement of 35 U.S.C. § 103(a) and this rejection should also be withdrawn.

Reconsideration and withdrawal of rejection of the claims as being unpatentable under 35 U.S.C. § 103 (a) over the Karas et al, Suskind et al, Pommier et al and Arnold et al Patents taken in view of Tanner et al '858 are also respectfully requested.

As seen from the argument advanced above, none of Karas et al, Suskind et al, Pommier et al and Arnold et al are concerned with a method for making a molded body which is both completely biodegradable as well as liquid resistant or impenetrable. Tanner et al adds nothing to these primary references to make them more relevant to the present invention. The examiner cites Tanner et al as showing the application of a heat-sealable interior barrier layer onto paperboard. The examiner asserts that Tanner et al does not show the use of applicants' fiber/starch composites. However, Tanner et al, in addition, is directed to a paper-board based package which contains a non-biodegradable layer namely, polyethylene. Thus, as is clear from column 2, lines 15 and following, a preferred embodiment of the laminate structure comprises a paperboard substrate, a matte layer of polyethylene extrusion coated onto the product-contact side of the paper board and a gloss layer of a biodegradable thermoplastic material extrusion coated on the exterior of the paperboard. Consequently, Tanner et al is not directed to a completely biodegradable material. Accordingly, the combination of these references simply do not leave the skilled artisan to a moldable composite which is both biodegradable and liquid impenetrable as is required by the present claims as amended. This rejection should also be withdrawn.

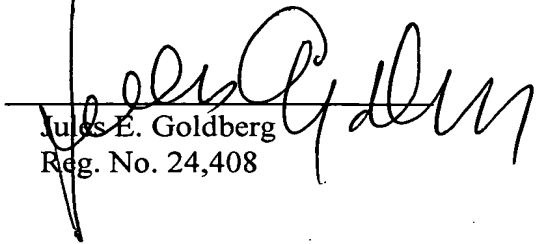
In view of the foregoing, as well of the examiner's indication in the interview that agreement had been reached with respect to allowability of at least certain of the claims, it is

submitted that this application is now in condition for allowance and prompt notice of allowance are earnestly solicited.

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Respectfully submitted,
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